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P. 26

# **Annotated Directory of US Government Information System Projects of Potential Interest to NASA/SSPO**

## **Final Report**

N92-13881

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(NASA-CR-188946) ANNOTATED DIRECTORY OF US  
GOVERNMENT INFORMATION SYSTEM PROJECTS OF  
POTENTIAL INTEREST TO NASA/SSPO Final Report  
(Research Inst. for Advanced Computer  
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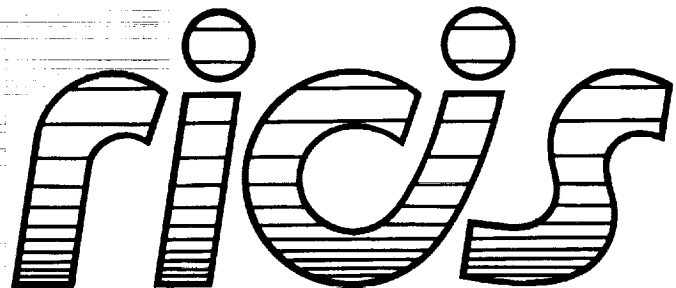
**Sue LeGrand**

**SofTech, Inc.**

**October 7, 1988**

**Cooperative Agreement NCC 9-16  
Research Activity No. SE.17**

**Space Station Program Office**



**Research Institute for Computing and Information Systems  
University of Houston - Clear Lake**

**T · E · C · H · N · I · C · A · L      R · E · P · O · R · T**

## ***The RICIS Concept***

The University of Houston-Clear Lake established the Research Institute for Computing and Information systems in 1986 to encourage NASA Johnson Space Center and local industry to actively support research in the computing and information sciences. As part of this endeavor, UH-Clear Lake proposed a partnership with JSC to jointly define and manage an integrated program of research in advanced data processing technology needed for JSC's main missions, including administrative, engineering and science responsibilities. JSC agreed and entered into a three-year cooperative agreement with UH-Clear Lake beginning in May, 1986, to jointly plan and execute such research through RICIS. Additionally, under Cooperative Agreement NCC 9-16, computing and educational facilities are shared by the two institutions to conduct the research.

The mission of RICIS is to conduct, coordinate and disseminate research on computing and information systems among researchers, sponsors and users from UH-Clear Lake, NASA/JSC, and other research organizations. Within UH-Clear Lake, the mission is being implemented through interdisciplinary involvement of faculty and students from each of the four schools: Business, Education, Human Sciences and Humanities, and Natural and Applied Sciences.

Other research organizations are involved via the "gateway" concept. UH-Clear Lake establishes relationships with other universities and research organizations, having common research interests, to provide additional sources of expertise to conduct needed research.

A major role of RICIS is to find the best match of sponsors, researchers and research objectives to advance knowledge in the computing and information sciences. Working jointly with NASA/JSC, RICIS advises on research needs, recommends principals for conducting the research, provides technical and administrative support to coordinate the research, and integrates technical results into the cooperative goals of UH-Clear Lake and NASA/JSC.

***Annotated Directory of US  
Government Information System  
Projects of Potential Interest to  
NASA/SSPO***

***Final Report***

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## **Preface**

This research was conducted under auspices of the Research Institute for Computing and Information Systems by Sue LeGrand of SofTech, Inc. Dr. Charles McKay served as RICIS technical representative.

Funding has been provided by the NASA Space Station Program Office, NASA Headquarters through Cooperative Agreement NCC 9-16 between NASA Johnson Space Center and the University of Houston-Clear Lake. The NASA technical monitor for this activity was Robert B. MacDonald, Assistant for Research, Education & University Programs for the Mission Support Directorate, NASA/JSC.

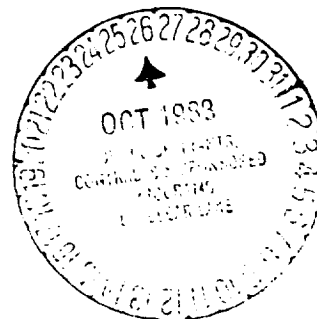
The views and conclusions contained in this report are those of the author and should not be interpreted as representative of the official policies, either express or implied, of NASA or the United States Government.

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# **SOFTech**

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**ANNOTATED DIRECTORY OF  
US GOVERNMENT INFORMATION  
SYSTEM PROJECTS  
OF POTENTIAL INTEREST TO NASA/SSPO**

**FINAL REPORT**

**CONTRACT NO. SE. 17**

**October 7, 1988**

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**Prepared for**

**National Aeronautics and Space Administration  
Washington, DC 20546**

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## Section 1

### Introduction

#### 1.1 Purpose and Scope

The purpose of this research activity was to develop a list for NASA of major US government information systems contacts who are able to cooperate with NASA on technical interchange. The list contains the names of appropriate managers involved in major information systems projects, US government office officials and their hierarchy up to the highest officials whose major responsibilities include government information systems development.

#### 1.2 Overview

In order to obtain this annotated directory, interviews were conducted with contacts in each branch of the Department of Defense (DoD), the Strategic Defense Initiative Office (SDIO) and the Federal Aviation Administration (FAA). A copy of the survey form is shown in Appendix A. Table 1 shows a comparison of the data gathered about each program.

Each point of contact was interested in establishing a two-way liaison with the NASA Space Station Program Office. Some responses came unsolicited. Each of the three DoD branches now have a command dedicated to information systems. Each is concerned with managing information as opposed to raw data. Vital elements are systems which can collect, record, transmit, disseminate, store, process, retrieve and present information. The emphasis is on having accurate, timely and appropriate information to support mission critical and other applications.

The Ada Executive Officials in the DoD organizations are listed below. They are to monitor programs relative to the use of Ada, support the Ada program activities in the DoD Component, and serve as a focal point in the DoD Component for all Ada program activities. They are not in the chain of command with the program managers listed in the following programs. The Directors are:

Army:	LtGen. Bruce Reed Harris, Director of Information Systems for Command Control, Communications and Computers (DISC4).
Navy:	Adm. Harry Quast, Director, Department of the Navy Information Management
Air Force:	LtGen. George Monahan, Principal Deputy Assistant Secretary of the Air Force (Acquisition)
SDIO:	CAPT. John Donegan, Program Manager, Strategic Defense System Phase 1

The Ada language is predominant in the list of Air Force programs and for mission critical programs in other organizations. The Navy is still using CMS-2 and COBOL, but they are investigating Ada. SDIO is using all Ada for the Battle Management System, but it is, at this time, reluctant to try Ada for the Management Information System.

#### 1.3 Recommendations

Establish liaisons and regularly scheduled technical discussions and exchange of technical papers, documents, and opinions between technical points of contact and specific DoD program offices.

##### Use of the results of information exchanges

The SSI and projects listed in this report have in common the need to:

- Collect and process data.
- Analyze, distribute, and archive information and.
- Monitor and control the processes that perform these functions.

Formal liaisons between SSI and DoD Information System Project Offices for information exchange will be used to compare experiences of using resources and plans in providing such things as:

- System analysis, design, and development
- Life cycle data base (with reusable components)
- Project library management
- System integration and test
- Quality assurance
- Configuration management
- Maintenance and enhancement

to propose, develop, and sustain large, complex, distributed systems. Consideration will be given to functional requirements such as productivity and phase management, and non-functional requirements such as real-time issues, fault tolerance, and power and capacity constraints.

### Goals of information interchanges

- A baseline from which subsequent progress in the appropriate information system applications can be made
- An extensible or compactable model for information systems to provide larger, more complex, or smaller, more simple applications
- A lessons implied or learned stimulus and opportunity to develop methodologies and tools which better address the issues of developing and managing information systems

### Steps to establish liaisons

- 1) Create a prioritized list of technical issues facing SSI projects.  
Provide a list of current and projected SSI issues. Interview a contact in each SSI project to confirm the priority of issues identified at this time. Report the prioritized list to SSPO.
- 2) Establish the relevance of listed projects to SSI issues.  
Design a table to compare the SSI projects to the projects listed in this report, indicating areas of relevance. Design another table comparing the SSI issues to the projects listed in this report.
- 3) Choose the appropriate participants for technology transfer.  
Verify the suitability of a liaison between SSPO and each of the points of contact listed in this report. Investigate candidates who may have recently become eligible. Evaluate the new list of participants and report why each candidate is suitable as a liaison.
- 4) Establish individual interchanges with the participants.  
Arrange and conduct an in-person meeting with each appropriate point of contact and establish a schedule for future meetings, contingent upon the existing and future relevance of the project to SSI issues.
- 5) Establish a communication medium available to each participant.  
Arrange the most convenient mode of frequent informal correspondence with each participant. (Defense Data Network, etc.) Formulate the best procedure for exchanging documents.
- 6) Establish a schedule of reporting to SSPO.  
Produce regularly scheduled reports and summaries. Show each available project plan as a high level SADT chart, giving consistency to the plans as reported. Define arrangements for reporting special occasions or conditions as they occur.
- 7) Continue interchanges on a regular schedule.  
Define a schedule for in-person meetings and informal correspondence with each participant, including the rationale for each schedule. Update the schedules depending on the continued suitability of each project during its lifetime.

## Justification

Information exchange between appropriate groups provides a larger return on investment for each group. It helps to organize system level decisions and their descendants as they relate to the life cycle issues of product and process use and reuse. Information exchange leads to an improved conceptual model and provides a common domain of discourse that facilitates the derivation of:

- Management and planning insights
- Requirements specifications
- Acceptance criteria and procedures
- Analysis of design alternatives
- Mapping of design alternatives to preliminary design documents
- Abstraction of a conceptual model
- First level mapping of the conceptual model to an implementation model

Formal liaisons between SSPO and other Information System Project Offices would provide information exchange by the four engineering constituencies concerned with the life cycle support environment. These constituencies include:

- Computer Systems Engineering
- Software Engineering
- Hardware Engineering
- Operations and Logistics

**Table 1**  
**Data Comparison of Projects**

Program / /	Size \$ or sloc	Host	Tar- get	Lang- uage	Net- work	Start time	End time
Air Force Programs							
AFSCN	5M	IBM	IBM	Ada, others	AFSCN	•	•
ARTS	300K	VAX	80286	Ada, Jovial	None	6/84	5/93
ATF	4-6M	VAX	M68000	Ada	Ethernet, DECnet	11/86	12/90
BSTS	1M	VAX	TBD	Ada	AFSCN	•	•
CSOC	800K	IBM	IBM	Ada, Jovial	None	Some parts now	
Navy Programs							
ACDS	160K	VAX	UYK	CMS-2	None	5/84	12/91
CAD/CAM	5M	POSIX	None	Vendor specific	Ether- net	5/85	1/97
NALCOMIS	5M	DPS-6	COBOL	COBOL	LAN	979	1996
SPAR	\$2B	IBM	IBM	COBOL	SNA	1980	2015
Army Program							
AFATDS	1.2M	VAX	68020	Ada	Token Ring	5/84	4/89
SDIO Programs							
BMS	>10M	Many	TBD	Ada	TBD	5/88	1995
MIS	TBD	HP & TBD	TBD	COBOL Pascal	TBD	11/89	10/91
TAIS	\$800K	Sun	TBD	TBD	Unix Based	6/86	4/89
FAA Program							
AAS	••			Ada			

• Classified Information

•• Information forthcoming after contract negotiations are completed.

## Section 2

### Programs of Potential Interest

#### 2.1 Air Force Programs

Name: Air Force Satellite Control Network (AFSCN)

Description: Data transmission and orbital support services for command, control and communication.

Relation to other projects: Data network for all satellites, ground systems and test centers.

Organization: AF Space Division

Duration: (Classified information)

Security level for interaction: Management information mostly unclassified

Program Manager: Col. Larry Whipple, Program Director, AFSCN  
SD/CWC AFSD  
(213) 643-2532

Reporting Structure: Col. Whipple

reports to: B/Gen Jean Click, Deputy Commander for Communication  
& Operations Support

Point of Contact: Capt. Mike Taint  
AFSD  
Los Angeles Air Force Base  
P.O. Box 92960  
Los Angeles, CA 90009-2960  
(213) 643-2532

Contractors: IBM, Ford Aerospace

Size of Project: Approximately 5 million lines of code

Computer Language(s): Ada, Jovial, FORTRAN, Assembler

Computers:

Host: IBM

Networks: This is the network.

Technical Issues: Integration of numerous system program offices

Technical Information: See Point of Contact.

Name: Automated Remote Tracking Station (ARTS)

Description: Improvement and modernization of Air Force Satellite Control Network

Relation to other projects: Interface and support of over 50 high priority  
DoD and NASA Satellites

Organization: Air Force Space Command

Duration: June 1984 to May 1993

Security level for interaction: none

Program Manager: Lt. Col. Michael A. Harvey, ARTS Program Manager  
(213) 643-1018

Reporting Structure: Lt. Col. Harvey  
reports to: Col. George C. Jackson, Jr.

Point of Contact: 2nd Lt. Larry S. Walker  
SD/CWRA P.O. Box 92960  
Los Angeles AFB, CA 90009  
(213) 643-1081

Contractors: Ford Aerospace

Subcontractors: HRB Singer, Stanford Telecommunications, Datron/Loral

Size of Project: Approximately 850,000 man hours  
Approximately \$97.4 million  
300,000 lines of code

Computer Language(s): Ada for program design language  
Jovial 73 and Assembler for source code

Computers:

Host: VAX

Target: Custom designed distributed system based on Intel 80286/12 processors

Networks: None

Technical Issues: None mentioned

Technical Information: A and B Specs available from point of contact

Name: Advanced Tactical Fighter (ATF)

Description: Avionics with a common modular approach. Each hardware component performs many functions under software control. Real-time, embedded, distributed, interrupt driven systems.

Relation to other projects: Navy is also interested. Air Force may pattern their Software Engineering Environment after the Space Station Program Software Support Environment.

Organization: Air Force Systems Command

Duration: Phase 1 is November 1986 to December 1990. Full scale development starts January 1991.

Security level for interaction: none

Program Manager: B/Gen. James Fain, ATF Program Director  
(513) 255-4167

Reporting Structure: B/Gen. Fain

reports to: Gen. Thurmond, Commander, Air Force Systems Division

Point of Contact: Lt. Col. R.T. Lyons, Jr. Chief, ATF Core Avionics Div.  
ASD/YFAC Wright Patterson AFB, Ohio 45433-6543  
(513) 255-1418

Contractor(s): Two teams are competing until SDR:

1. Lockheed, Boeing & General Dynamics
2. Northrop, McDonnell Douglas

Size of Project: \$62 billion (entire vehicle)  
4 to 6 million lines of code

Computer Language(s): All Ada (needed for maintenance)

Computers:

Host: VAX clusters, Rational Workstations

Target: 1750s (Northrop team)  
Intel 80960 (Lockheed team)  
Motorola 680XX temporarily (both teams)

Networks:

Host: Ethernet, DECnet, TCPIP

Target: Custom design fiber optic

Technical Issues:

Real-time performance

Interrupts in a distributed system

Technical Information: Available on-line at:

Joint Integrated Avionics Working Group Bulletin Board  
(513) 256-5884  
300.1200.2400 Baud rate  
8 bits, no parity, 1 stop bit



Name: Boost Surveillance & Tracking System (BSTS)

Description: Acquire mission data from military spacecraft; track ICBMs during boost phase.

Relation to other projects: (Classified information)

Organization: AF Space Division

Duration: (Classified Information)

Security level for interaction: Management information mostly unclassified

Program Manager: Col. D. M. Thomas, Program Director  
SD/CNB AFSD  
(213) 643-2532

Reporting Structure: Col. Thomas  
reports to: B/Gen Jean Click, Deputy Commander for Communication Operations Support

Point of Contact: Capt. Mike Taint  
AFSD  
Los Angeles Air Force Base  
P.O. Box 92960  
Los Angeles, CA 90009-2960  
(213) 643-2532

Contractors: Lockheed, Grumman (parallel until CDR)

Size of Project: Approximately 200,000 lines of code for space vehicle  
Approximately 1 million lines of code for ground system

Computer Language(s): Ada

Computers:  
Host: VAX

Networks: Will be integrated into the Air Force Satellite Control Network (AFSCN)

Technical Issues: None

Technical Information: See Point of Contact.

Name: Consolidated Space Operations Center (CSOC)

Description: Generic ground station (80% reusable)

Relation to other projects: Reuse plan throughout Space Command

Organization: AF Space Division

Duration: Some parts are operational now.

Security level for interaction: Management information mostly unclassified

Program Manager: Col. J. Payne, Program Director CSOC  
SD/CWO AFSD  
(213) 643-2532

Reporting Structure: Col. Payne  
reports to: BGen Jean Click, Deputy Commander for Communication  
& Operations Support

Point of Contact: Capt. Mike Taint  
AFSD  
Los Angeles Air Force Base  
P.O. Box 92960  
Los Angeles, CA 90009-2960  
(213) 643-2532

Contractors: Ford Aerospace

Size of Project: 800,000 lines of code

Computer Language(s): Ada and Jovial 73

Computers:  
Host: IBM

Networks: (none)

Technical Issues: Real-time programs on an MVS operating system

Technical Information: See Point of Contact.

## 2.2 Navy Programs

Name: Advanced Combat Direction System (ACDS) Block 1

Description: Command, control, surveillance and weapons interface for carriers and potentially for cruisers

Relation to other projects: Replacement for current programs on aircraft carriers

Organization: Navy Commander in Chief for Atlantic (CINC LANT)  
Navy Commander in Chief for Pacific (CINC PAC)

Duration: May 1984 to October 1991. Initial capability approximately July 1992.

Security level for interaction: Up to Secret

Program Manager: Cdr. George Harkness, ACDS Block 1 Project Manager  
Cdr. Kathie Paige, AEGES Software Program Manager  
(202) 692-2161

Reporting Structure: CDR. Harkness

reports to: Jerry Chandler, Technical Design Agent, NOSC

reports to: CAPT. Joel Crandall, USN

reports to: Adm. Ailes, NAVSEA 06

reports to: Adm. Harry Quast

Point of Contact: Bob Duffy, Consultant  
Comptek Research, Inc.  
2 Crystal Park Suite 700  
Arlington, VA 22202  
(703) 979-6200

Contractors: Hughes, San Diego

Subs: Unisys, Syscon

Size of Project: 160,000 lines of code

Computer Language(s): CMS-2L (Unisys)

Computers:

Host: VAX 8600 VMS

Target: AN/UYK - 43B

Networks: None

Technical Issues: CPU Throughput, I/O Bandwidth

Technical Information: Now in Prototyping

Name: Navy Computer Aided Design/ Computer Aided Manufacturing (CAD/CAM)

Description: Provide CAD/CAM to Navy Engineers. Combine various workstations on a network. Must be POSIX compliant and use standards such as GOSIP network, SQL database and CGM graphics.

Relation to other projects: Used in design and development of Navy Weapons Systems

Organization: Navy Systems Command and other DoD organizations

Duration: May 1985 to January 1997

Security level for interaction: Unclassified now. Up to Secret by 1991.

Program Manager: Dale O. Christensen  
NAVDAC code PMD-1  
(202) 433-7242

Reporting Structure: Mr. Christensen

reports to: Lee Meador, Technical Director

reports to: Ronald Garant, Commander, Naval Data Automation Command

reports to: Adm. Harry Quast, Director Navy Information Management

reports to: Mr. Robert Conn, Asst. Sect. Navy (Finance Mgt.)

Point of Contact: CDR. Larry G. Bostic, Deputy Program Mgr.  
NAVDAC PMD-1  
(202) 433-7242

Contractors: None

Size of Project: 5 million lines of code

Computer Language(s): Each workstation vendor dependent

Computers:

Host: POSIX compliant variety

Networks: GOSIP compliant variety

Technical Issues: Integration of multiple vendor software on single hardware/network platform

Technical Information: Technical specification is available.

Name: Naval Aviation Logistic Command Management Information System (NALCOMIS)

Description: Automated information system for aviation maintenance and material management

Relation to other projects: Exchanges requisition data with mailbox type system with Shipboard Uniform Automated Data System and Stock Point ADP System

Organization: Space and Naval Warfare System Command

Duration: 1979 to 1996

Security level for interaction: none

Program Manager: Cdr. Dutton  
Naval Air Sys. Command - NALCOMIS  
PMA-270  
Washington, D.C. 20361-1270  
(202) 692-8139

Reporting Structure: Cdr. Dutton

reports to: D. Distler, Prog. Directorate #12

reports to: Rear Adm. R. D. Friichtenicht, Dep. Comm, Ops.

reports to: Vice Adm J. B. Wilkinson, Commander Naval Air Sys Command

reports to: Adm. Prost, Chief, Naval Ops.

Point of Contact: C.J. Kreunen  
Naval Air System Command - NALCOMIS  
PMA - 270  
Washington, D.C. 20361-1270  
(202) 692-8139

Contractors: Earthier Undersign & Co.

Size of Project: 5 million lines of code

Computer Language(s): COBOL

Computers:

Host: Honeywell DPS-6, ruggedized for ship duty

Networks: Various telecommunications

Technical Issues: Software development started before hardware available. Redesign was necessary for HP proprietary protocols.

Technical Information: Requirements Statement and Executive Decision Paper on file [2], [17]

Name: Stock Point ADP Replacement Program (SPAR)

Description: Inventory control of all ship and aircraft parts and station supplies

Relation to other projects: Covers all Navy installations

Organization: Navy Automate Data Processing Selection Office

Duration: 1980 to 2015

Security level for interaction: none

Program Manager: CAPT. E.R. Chamberlin, SPAR Project Officer  
mc 047  
Naval Supp. Sys. Command  
Washington, D.C. 20376  
(202) 695-4459

Reporting Structure: CAPT. Chamberlin

reports to: CAPT. K.E. Kittock, Inventory & Info Sys. Directorate, mc 04

reports to: RAdm. Robt. Moore, Asst. Commander for Inventory & Sys. Integrity, mc 00

reports to: RAdm. Dan McKinnon, Commander, Naval Supply Systems Command

Point of Contact: Mary Lynn West, Business Manager  
Washington Naval Yard mc 04711  
ADPSO  
Washington, D.C. 20374  
(202) 695-4459

Contractors: IBM

Size of Project: 3,000 man years to initial installation in FY95

Computer Language(s): COBOL (will evaluate Ada)

Computers:

Host: IBM 3090

Networks: SNA token rings

Technical Issues: Unique system software

Technical Information: None given

### 2.3 Army Program

Name: Advanced Field Artillery Tactical Data System (AFATDS)

Description: Automated Command and Control to support all levels of command from platoon to corps

Relation to other projects: None given

Organization: CECOM

Security level for interaction: Unclassified

Program Manager: Col. J. Hmara  
SPIS-CC-TF  
Bldg. 457  
Ft. Monmouth, N.J.

Reporting Structure: Col. J. Hmara

reports to: M/Gen. Schott, Program Executive Officer, Command and Control System (PEOCCS)

reports to: Dr. J. Sculley, Army Acquisition Executive

reports to: Mr. Costello, Defense Acquisition Executive

Point of Contact: Harold (Skip) Carstenson, Software Director  
Dept. 897  
Magnavox Electronic Systems Company  
1313 Production Rd.  
Ft. Wayne, Ind. 46808  
(219) 429-5308

Contractors: Magnavox

Subs: Telos, Intellimac, SAIC

Size of Project: 1.2 million lines of code

Computer Language(s): Ada

Computers:

Host: VAX with VMS OS and VAX Ada

Target: MC68020 based Workstation with Telesoft Telegen 2 Ada

Networks: TI 802.5 Token Ring

Technical Issues: Compiler optimization critical  
Telesoft TeleGen 2 pragma INTERFACE worked well with small assembly routines.

Technical Information: Presentation to Washington Ada Symposium [7]

## 2.4 Strategic Defense Initiative Office Programs

Name: SDI Battle Management System (BMS)

Description: Decision making process, brains of the Space Defense System (SDS). Using rapid prototyping and interactive development of software. Using tailored versions of DOD-STD-2167A. Finalizing Software Policy Document. Developing methods with NSA for protecting software from corruption during transmission. Interested in fault-tolerant techniques.

Relation to other projects: Coordinates actions of the SDS

Organization: Space Defense Initiative Office

Duration: Software development from May 1988 to 1995. Now defining System Architecture.

Security level for interaction: Mostly unclassified.

Program Manager: CAPT. Jack Donegan (USN), Phase 1 Program Manager  
(202) 693-1539

Reporting Structure: CAPT. Donegan  
reports to: M/Gen. E. Fox, US Army  
reports to: L/Gen James Abramson, Director, SDIO

Point of Contact: Lt. Col. Charles Lillie  
SDS Software Manager  
SDIO/PP  
Pentagon  
Washington, D.C. 20301-7100  
(202) 693-1600

Contractors: General Electric, AT&T, Computer Science Corp.

Size of Project: Estimate 10 to 100 million lines of code

Computer Language(s): Ada

Computers:

Host: To be determined, mostly off-the-shelf.

Target: Most likely some special design.

Networks: To be determined. DDN for administration.

Technical Issues: Anticipate real-time will be a challenge

Technical Information: Many documents, see [19]. Ask POC for specific information.



Name: SDIO Management Information System (MIS)

Description: Headquarters system for all budgets and schedules

Relation to other projects: Must interact with MIS of:

Air Force SDI MIS  
SDIO System Engineering/Integration MIS  
Department of Energy  
NASA  
Others

Organization: Strategic Defense Initiative Office (SDIO)

Duration: October 1989 to October 1991

Security level for interaction: Secret

Program Manager: John Long, Chief, MIS Division  
SDIO-PP  
(202) 693-1651

Reporting Structure: Mr. Long

reports to: Dr. Richard Bleach, Director SDIO Program Planning

reports to: L/Gen. James Abramson, Director, SDIO

Point of Contact: Capt. Glen Ledebor  
SDIO Attn: CT  
The Pentagon Room 1E1019  
Washington, D.C. 20301-7100

Contractors: Polaris, Inc. and Executive Resources Associates

Size of Project: To be determined

Computer Language(s): COBOL, Pascal, Turbo Pascal

Computers:

Host: HP - 3000/70

Networks: To be determined

Technical Issues: None given

Technical Information: None given

Name: Technology Applications Information System (TAIS)

Description: Over 200 unclassified synopses of technology innovations for review by researchers and developers in DoD, Federal Agencies and private sector.

Relation to other projects: Technology problem referral system to a network of technical advisors. Accessible by computer modem, at no charge for use by any American corporation or citizen who has completed a Military Critical Technical Data Agreement and has been certified as eligible for access by the Defense Logistics Agency.

Organization: Strategic Defense Initiative Office (SDIO)

Duration: June 1986 to April 1989

Security level for interaction: none

Program Manager: Col. James A. Ball, Director, Technology Applications  
OSD/SDIO/TA  
(202) 693-1556

Reporting Structure: Col. Ball  
reports to: B/Gen. Schnelzer, Deputy for Technology  
reports to: L/Gen. James Abramson

Point of Contact: Kathy Price  
System Administrator for Database  
OSD/SDIO/TA  
Pentagon, Washington, D.C. 20301  
(202) 693-1556

Contractors: BDM Corp.

Size of Project: \$800,000 in 1988 (HW & SW)

Computer Language(s): To be decided, probably C

Computers:

Host: Sun Microsystem with UNIX

Networks: UNIX-based modem network

Technical Issues: Security arrangements

Technical Information: Information available on line. Federal Agency representatives may obtain access certification by addressing a request on official letterhead to:

Director, Technology Applications  
OSD/SDIO/T/TA  
Washington, D.C. 20301  
(800) 352-3572

## 2.5 FAA Program

Name: Federal Aviation Administration Advanced Automation System (FAA AAS)

Description: Improved controller workstations, computer software, and processors for the FAA's nationwide Air Traffic Control (ATC) System

Relation to other projects: Designed to accommodate future functional and technological enhancements

Organization: FAA

Security level for interaction: Unclassified

Program Manager: Lee Paige  
FAA  
800 Independence Ave. SW  
Washington, D.C. 20591  
(202) 267-9515

Point of Contact: Don Mullikin  
Manager, Advanced Automation Systems  
mc AAP-200  
FAA  
800 Independence Ave. SW  
Washington, D.C. 20591  
(202) 267-9524

Contractors: \*

Subs: \*

Size of Project: \*

Computer Language(s): Ada

Computers: \*

Networks: \*

Technical Issues: \*

Technical Information: \*

\* Information forthcoming after contract negotiations are complete.

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